CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE HATCHIE RIVER WATERSHED

4.1. BACKGROUND. This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:

i. General description of the subwatershed
ii. Description of point source contributions
ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
iii. Description of nonpoint source contributions

The Tennessee portion of the Hatchie River Watershed (HUC 08010208) has been delineated into eight HUC 10 (10-digit) subwatersheds, each of which is composed of one or more HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

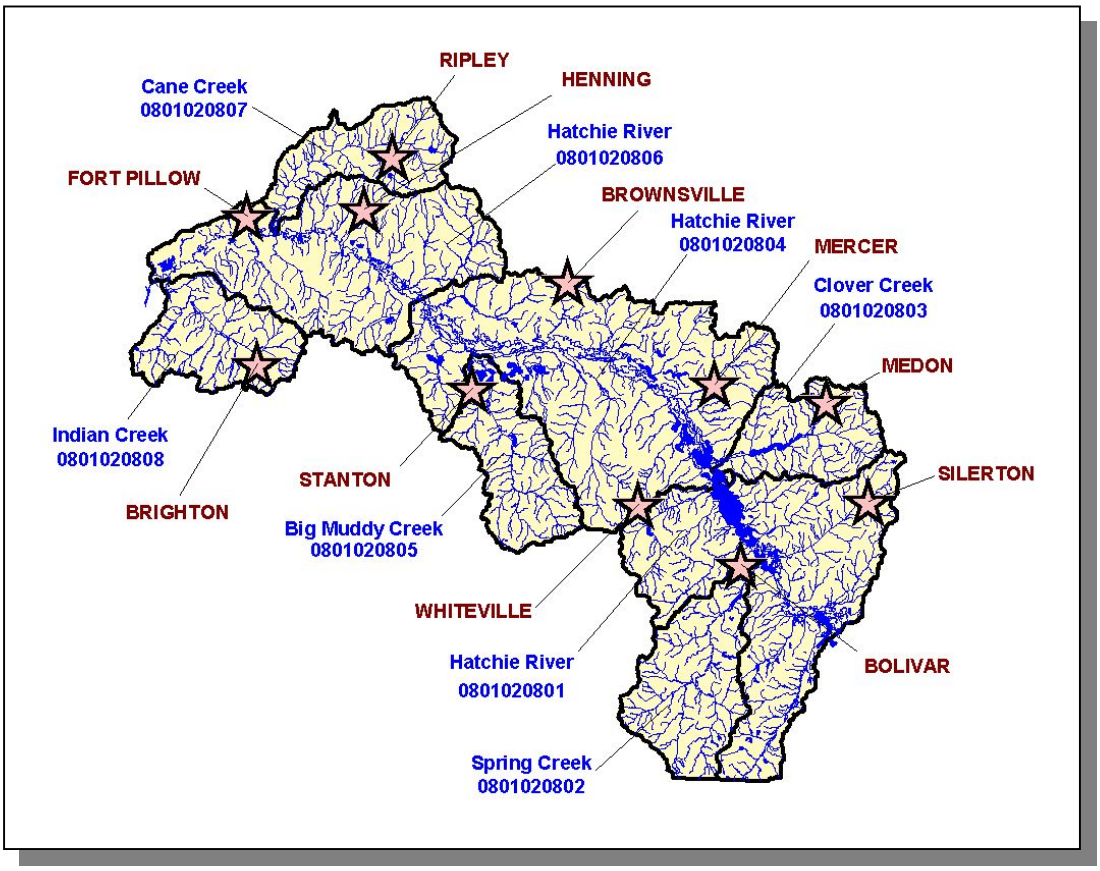

Figure 4-1. The Tennessee Portion of the Hatchie River Watershed is Composed of Eight USGS-Delineated Subwatersheds (10-Digit Subwatersheds). *Locations of Bolivar, Brighton, Brownsville, Fort Pillow, Henning, Medon, Mercer, Ripley, Silerton, Stanton, and Whiteville are shown for reference.*

4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Tennessee portion of the Hatchie River Watershed.

HUC-10	HUC-12	
0801020801	080102080101 (Hatchie River)	080102080107 (Grays Creek)
	080102080102 (Porters Creek)	080102080108 (Pleasant Run Creek)
	080102080103 (Wade Creek)	080102080109 (Mill Creek)
	080102080104 (Cub Creek)	080102080110 (Short Creek)
	080102080105 (Hatchie River)	080102080111 (Clear Creek)
	080102080106 (Piney Creek)	
0801020802	080102080201 (Upper Spring Creek)	080102080202 (Lower Spring Creek)
0801020803	080102080301 (Lacy Creek)	080102080302 (Clover Creek)
0801020804	080102080401 (Hatchie River)	080102080407 (Poplar Creek)
	080102080402 (Muddy Creek)	080102080408 (Carter Creek)
	080102080403 (Big Black Creek)	080102080409 (Sugar Creek)
	080102080404 (Hatchie River)	080102080410 (Hatchie River)
	080102080405 (Jeffers Creek)	080102080411 (Little Muddy Creek)
	080102080406 (Bear Creek)	080102080412 (Cypress Creek)
0801020805	080102080501 (Upper Big Muddy Creek)	080102080502 (Lower Big Muddy Creek)
0801020806	080102080601 (Hatchie River)	080102080604 (Town Creek)
	080102080602 (Lagoon Creek)	080102080605 (Hatchie River)
	080102080603 (Hatchie River)	080102080606 (Mathis Creek)
0801020807	080102080701 (Upper Cane Creek)	080102080702 (Lower Cane Creek)
0801020808	080102080801 (Upper Indian Creek)	080102080802 (Lower Indian Creek)

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. *NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.*